



# INSTRUCT-O-GRAM

## THE HANDS-ON TRAINING GUIDE FOR THE FIRE INSTRUCTOR

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### 52 Drills in 52 Weeks

#### Task

How often do you train? What subject matter do you cover in the period of a year? Do you return to the concept of “back to the basics”? Is your training program really effective? Do these questions sound familiar?

As training officers and company officers we have often been guilty of taking the easiest way out. We oftentimes just make out training schedules full of activities, with a variety of exotic subjects. Let's take a reality break and be truthful with ourselves. What we see is not always what we get. This exotic subject matter we put on paper; is it meeting the mission statement of your department? Is it fostering growth and development of the personnel tasked with the mitigation of hazardous scenes?

We have asked a lot of questions. Hopefully this *Instruct-O-Gram* will provide some solutions. We have listed 52 subjects for training sessions. There are many more. Remember, training is the key to safe and efficient operations.

#### Objectives

To assist the instructor/company officer in scheduling “in-service” training sessions which:

- a. meet the needs of your personnel.
- b. meet the needs of your company operations.
- c. meet the mission statement of your department.
- d. are well balanced in subject matter.
- e. maintain and improve the basic skills necessary for effective emergency scene operations.
- f. update and upgrade knowledge necessary to stay abreast of the current “state of art.”

#### Instructional Aids

Instructional aids will vary with each particular drill. Utilize the equipment that you have available on your department's apparatus. As an added aspect, new technology can be introduced by utilizing resources at hand.

#### Estimated Teaching Time

The amount of time to successfully complete each training session will vary depending on the topic. Always remember to allow enough time for students not to be rushed through. These time periods will vary and will depend on the size of the department, number of personnel and equipment available.

#### Motivating the Student

The role is reversed in this IOG. The student is the instructor/company officer. Unless the instructor/company officer is motivated to supply and conduct effective training, how can we possibly expect the firefighter to be motivated in receiving the material? Each time an instructor goes into a training session you must step to the line with as much enthusiasm and desire as does a team who is down by 5 points with only seconds to go in the BIG game. Your drills must be well planned. Subject matter must be relevant to both the student's and departmental needs. The time allotted for various subjects must be realistic. With each of these items in place and with proper follow through, the instructor and student will be better motivated in the teaching and learning process.

#### Presentation

1. Orientation
  - a. Organization of the department
  - b. Rules and regulations

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- c. Standard operating guidelines
2. Fire Department Records
  - a. Personnel
  - b. Fire reports/department writing
  - c. Data entry/NFIRS
3. Firefighter Safety
  - a. Personal protective clothing
  - b. Breathing apparatus
  - c. In station/training
  - d. Responses (responding/returning)
  - e. Fireground operations
4. Engine Company Equipment
  - a. Nozzles and appliances
  - b. Location on apparatus
  - c. Care and maintenance
  - d. Use on fireground
5. Hose
  - a. Care/maintenance/testing
  - b. Hose loads
  - c. Hose rolls/carries/drag
6. Hose Layouts
  - a. Attack lines
  - b. Supply lines
  - c. Forward/reverse lays
  - d. Hydrant hookup
7. Breathing Apparatus (SCBA)
  - a. Operations/controls
  - b. Care/maintenance
  - c. Donning/doffing
8. Breathing Apparatus (SCBA)
  - a. Climbing stairs
  - b. Climbing ladders
  - c. Searching room/maze
9. Search and Rescue
  - a. Search patterns
  - b. Type/number of searches
  - c. Communications/control
  - d. Emergency procedures
10. Ladders (Ground)
  - a. Care/maintenance
  - b. Carrying/raising/securing
  - c. Climbing/working from
  - d. Safety
  - e. Special uses
11. Ladders (Aerial)
  - a. Positioning
  - b. Stabilizing
  - c. Operating
  - d. Safety features
12. Ropes and Knots
  - a. Types of rope
  - b. Care/maintenance
  - c. Knot tying
  - d. Tying/hauling equipment
  - e. Special rescue
13. Combined Evolutions
  - a. Multiple companies
  - b. Multiple evolutions
  - c. Control/safety
  - d. Evaluation
14. Water Supply (Municipal)
  - a. Municipal source
  - b. Type of system/construction
  - c. Adequacy
  - d. Reserve supply
15. Water Supply (Rural)
  - a. Natural resources
  - b. Drafting capabilities
  - c. Relay operations
  - d. Tanker supply
  - e. Tanker shuttle/portable tank
16. Fire Streams
  - a. Deck guns/ladder guns
  - b. Proper application
  - c. Safety in operations
17. Combined Evolutions (Hose, Ladders and SCBA)
  - a. Multiple company operations
  - b. Combining basic evolutions
  - c. Evaluation (individuals/companies)
18. Forcible Entry (Doors/Windows)
  - a. Types of doors and windows
  - b. Types of locks
  - c. Use of hand tools
  - d. Use of power tools
19. Forcible Entry (Roofs/Floors/Walls/Ceilings)
  - a. Methods of opening
  - b. Use of hand tools
  - c. Use of power tools
  - d. Safety in operating
20. Chemistry of Fire Behavior
  - a. Products of combustion
  - b. Stages of FIRE TEC violent reactions
  - c. Toxins
  - d. Firefighter safety
21. Fire Extinguishers
  - a. Classifications
  - b. Maintenance
  - c. Application/operations
22. Building Construction
  - a. Types of buildings
  - b. Types of construction
  - c. Compartmentalization
  - d. Private fire protection systems
23. Ventilation (Fundamentals)
  - a. Principles of ventilation
  - b. Types of ventilation
  - c. Who/where/when/how
  - d. Firefighter safety
24. Ventilation (Opening Roofs)
  - a. Type/construction
  - b. Size and location of hole
  - c. Use of hand tools/power tools
  - d. Coordinating with firefighters
  - e. Firefighter safety
25. Overhaul
  - a. Value of overhaul
  - b. Prevention of rekindle
  - c. Locating evidence
  - d. Firefighter safety
26. Foam
  - a. Types of foam
  - b. Amount available
  - c. Application
  - d. Special equipment

27. Hazardous Communications
  - a. MSDS sheets
  - b. Right-to-Know law
  - c. Annual review of MSDS books
  - d. Preplanning
28. CPR/Automated External Defibrillator (AED)
  - a. New American Heart Association (AHA) standards
  - b. AED
29. Ambulance Operations
  - a. Location of equipment
  - b. Update on new equipment
  - c. Update on operations
30. Communications
  - a. Central dispatch
  - b. Telephone procedures
  - c. Radio procedures
  - d. Mutual aid
31. Hazardous Materials (Basic)
  - a. Identification
  - b. Storage/transportation
  - c. Local risk factors
  - d. Firefighter capabilities
32. Hazardous Chemicals (Basic)
  - a. Identification
  - b. Storage/transportation
  - c. Local risk factors
  - d. Firefighter capabilities
33. Rescue (Non-Firefighting)
  - a. Special equipment
  - b. Training of personnel
  - c. Protective equipment
  - d. Personnel safety
34. Extrication (Vehicle/Industrial)
  - a. Special equipment
  - b. Training of personnel
  - c. Medical assistance
  - d. Personnel
35. Public/Private Utilities (Gas/Electric)
  - a. Local SOPs
  - b. Interior/electrical incidents
  - c. Protective equipment
  - d. Special training
36. Private Fire Protection (Sprinklers)
  - a. Value of sprinklers
  - b. Types of systems
  - c. Fire department connections
  - d. Special systems
37. Private Fire Protection (Standpipes)
  - a. Types of standpipes
  - b. Fire department connections
  - c. Firefighting operations
38. Company Operations
  - a. Search/rescue
  - b. Attack lines/water supply
  - c. SCBA/ventilation
  - d. Coordinating the attack
39. Special Equipment
  - a. Generators/floodlights
  - b. Compressors/cascades
  - c. Portable pumps
40. Driver Training
  - a. Driving regulations
  - b. Driver responsibilities
  - c. Practice driving
41. Apparatus Operation
  - a. Responsibility of driver
  - b. Daily maintenance/apparatus
  - c. Daily maintenance/equipment
42. Arson/Responsibility of the Firefighter in Fire Investigation
  - a. Fire cause determination
  - b. Locating/protecting/preserving evidence
  - c. Assisting investigators
  - d. Testifying as a witness
43. Inspections
  - a. Firefighter responsibility
  - b. Regulations/codes
  - c. Common/special hazards
  - d. Public relations
44. Public Education
  - a. Firefighter responsibility
  - b. Home fire safety
  - c. EDITH (Exit Drills in the Home)
  - d. Personal fire safety
  - e. Fire and smoke detectors
45. Pre-Planning (Target Hazards)
  - a. On-site visitation
  - b. Interior/exterior problems
  - c. Private fire protection
  - d. Fire department operations
46. High-Rise (Medium-Rise) Operations
  - a. Life hazard
  - b. Logistical problems
  - c. Building fire protection systems
  - d. Local departmental SOPs
47. Ground Fires (Brush/Grass/Forest)
  - a. Local weather
  - b. Topography
  - c. Local manpower
  - d. Local equipment
  - e. Mutual aid
  - f. Fireground operations
48. Transportation Incidents
  - a. Local risk factor
  - b. Resources
  - c. Special equipment
  - d. Training
49. Terrorism
  - a. Local risk factors
  - b. Target hazards
  - c. Types of terrorism (domestic and international)
  - d. Firefighter capabilities
50. Bloodborne/Airborne Pathogens
  - a. Routes of exposure
  - b. Different types of potential exposure
  - c. Personal protective equipment
51. Building Collapse
  - a. Types of building construction
  - b. Collapse zones
  - c. Why different buildings collapse
  - d. Effects of fire/other disasters on the building

## 52. Live Fire Evolutions

- a. Done in compliance with *NFPA 1403*
- b. Address training objectives of *NFPA 1001*

**Application****Evolution #1**

Have each firefighter identify the terminology of fire department ground ladders including:

1. Butt
2. Tip
3. Fly
4. Bed
5. Halyard
6. Roof hooks
7. Dogs/pawls
8. Beams/trusses
9. Rung
10. Sensor label

Have each firefighter identify ladder types available to their fire department.

Have firefighters clean ladders with appropriate cleaning solutions and lubricate ladders.

Have firefighters inspect ladders for:

1. Slivers
2. Frayed halyards/cables
3. Bent rungs/beams
4. Loose parts
5. Cracks
6. Unusual wear

**Evolution #2**

The firefighters shall be able to remove/replace the fire department ground ladders from their apparatus.

The firefighters shall be able to select the type of fire department ground ladders used for a specific job. (Job specified by instructor)

The firefighters shall demonstrate the proper methods for carrying each ladder selected for the job assignment from part 2 of this evolution.

The firefighters shall demonstrate the proper methods and techniques for raising and lowering of fire department ground ladders.

The firefighters shall demonstrate the proper positioning of the ladders in reference to the job assigned in part 2.

**Evolution #3**

The firefighters will demonstrate the proper methods for climbing:

1. Straight or wall ladder
2. Extension ladder
3. Placing roof ladder on a roof for use

The firefighters shall demonstrate the use of:

1. Safety belts
2. Leg locks
3. Passing another firefighter
4. Assisting victims on ladders
5. Carrying hand tools while ascending and descending a ladder
6. Water application off of a ground ladder
7. Rescue from a window.
8. Making access to a flat roof and a pitched roof

**Resources**

Fire Service Ground Ladder Practices, 8<sup>th</sup> Edition, International Fire Service Training Association, Oklahoma State University, Fire Protection Publications, April 1993

North Carolina Fire and Rescue Commission Fire Fighter 1 Curriculum, North Carolina Department of Fire Marshal, Ladders Level I, 1992

Chapel Hill Fire Department Training Standard for Ground Ladder Operations, Chapel Hill Fire Department, Chapel Hill, North Carolina, 1998

Delaware State Fire School Continuing Education Training Drill Guideline Fire Fighting, Ladders, Drill Number CF-910103, January 1990

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